

**AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior version, and listings, of claims in the application:

**Listing Of All Claims**

1. (Currently Amended) A method comprising:  
  
generating packets of content data to be broadcast from a content provider system via a  
  
network wherein the packets of content data include metadata describing the content  
  
data;  
  
composing a playlist designating an order in which said packets of content are to be  
  
broadcast;  
  
composing a transmission of said packets of content data based on said playlist; and  
  
executing said transmission of said packets of content data according to said playlist and a  
  
transmission policy, wherein the transmission policy is based on a playout policy and  
  
one or more network resources that are available for said transmission, wherein the  
  
playout policy is a list of protocol-neutral and protocol-specific transmission settings,  
  
and wherein the protocol-specific transmission settings are specific to a protocol used  
  
by a transmission execution process.
2. (Original) The method of claim 1, wherein said generating packets of content data and said  
  
composing a playlist are performed by the content provider system.

3. (Original) The method of claim 1, wherein said composing a transmission and executing said transmission are performed by a broadcast system head-end.
4. (Original) The method of claim 1, wherein said metadata comprises Extensible Markup Language (XML) tags.
5. (Original) The method of claim 1, wherein said metadata comprises pre-show content discovery information.
6. (Original) The method of claim 1, wherein said metadata comprises real-time content discovery information.
7. (Original) The method of claim 1, wherein said generating packets of content data comprises:  
gathering content to be broadcast from a content cache on the content provider system;  
separating said content into packages and package elements within the packages;  
assigning each package and package element a unique identifier;  
storing said packages in a package cache;  
assigning metadata tags identifying content within the packages and package elements to the  
packages and package elements; and  
marking tagged packages as ready for inclusion in playlists.
8. (Original) The method of claim 7, wherein said composing a playlist comprises:

grouping all related packages into content groups;  
encapsulating content groups into a playlist; and  
passing the playlist to a transmission composition process.

9. (Original) The method of claim 8, further comprising concatenating two or more portions of metadata in the playlist prior to passing the playlist to a transmission composition process to generate metadata representing the entire playlist.
10. (Original) The method of claim 8, wherein said encapsulating content groups into a playlist further comprises encapsulating said content groups into a Motion Picture Experts Group-2 (MPEG-2) multiplex.
11. (Original) The method of claim 1, wherein said composing a transmission comprises:  
selecting a playlist for scheduling;  
defining playout policy parameters;  
determining bandwidth required to transmit the playlist;  
determining transmission policy parameters based on the bandwidth required to transmit the playlist and the playout policy parameters;  
assigning network resources to the playlist based on the transmission policy;  
caching the transmission as active and scheduled.
12. (Original) The method of claim 8, wherein said executing said transmission comprises:  
reading a previously generated transmission;

loading transmission policy parameters;  
encoding announcement data for each content package into an announcement data stream  
describing a schedule of content to be broadcast during execution of the transmission;  
encoding metadata for each content package into a metadata stream providing a description  
of content within a content stream;  
sending pre-show content discovery information describing a schedule of content to be  
broadcast during execution of the transmission; and  
sending announcement, metadata and content data streams according to a predefined timeslot  
format.

13. (Previously Presented) The method of claim 12, further comprising:

receiving said packets of content data at a receiver connected with said content provider  
system via said network; and  
selectively caching or presenting the packets based on a comparison of the metadata  
describing the content data and user profile information stored on the receiver,  
wherein said receiving said packets of content data comprises:  
reading the announcement data stream;  
finding a predetermined metadata Uniform Resource Locator (URL) in the  
announcement data stream identifying a location of the metadata stream;  
decoding the metadata stream identified by the predetermined metadata URL;  
correlating metadata from the decoded metadata stream to user profile information  
stored within the receiver;

preparing cache space adequate to store content that has metadata matching the user profile information; and  
caching packages with metadata highly correlated with the filtering criteria.

14. (Currently Amended) A system comprising:

a content provider system to generate packets of content data to be broadcast from the content provider system via a first network connected with the content provider system wherein the packets of content data include metadata describing the content data and compose a playlist designating an order in which said packets of content are to be broadcast; and

a broadcast system head-end connected with said content provider system via said first network to receive said packets of content data and said playlist, compose a transmission of said packets of content data based on said playlist, and execute said transmission of said packets of content data according to said playlist and a transmission policy, wherein the transmission policy is based on a playout policy and one or more network resources that are available for said transmission, wherein the playout policy is a list of protocol-neutral and protocol-specific transmission settings, and wherein the protocol-specific transmission settings are specific to a protocol used by a transmission execution process.

15. (Original) The system of claim of claim 14, wherein said content provider system:  
gathers content to be broadcast from a content cache on the content provider system;  
separates said content into packages and package elements within the packages;

assigns each package and package element a unique identifier;  
stores said packages in a package cache;  
assigns metadata tags identifying content within the packages and package elements to the  
packages and package elements; and  
marks tagged packages as ready for inclusion in playlists.

16. (Original) The system of claim 15, wherein said content provider system:  
groups all related packages into content groups;  
encapsulates content groups into a playlist; and  
passes the playlist to a transmission composition process.
17. (Original) The system of claim 16, content provider system further concatenates two or more  
portions of metadata in the playlist prior to passing the playlist to a transmission composition  
process to generate metadata representing the entire playlist.
18. (Original) The system of claim 14, wherein said broadcast system head-end:  
selects a playlist for scheduling;  
defines playout policy parameters;  
determines bandwidth required to transmit the playlist;  
determines transmission policy parameters based on the bandwidth required to transmit the  
playlist and the playout policy parameters;  
assigns network resources to the playlist based on the transmission policy;  
caching the transmission as active and scheduled.

19. (Original) The system of claim 15, wherein said broadcast system head-end:
- reads a previously generated transmission;
  - loads transmission policy parameters;
  - encodes announcement data for each content package into an announcement data stream
    - describing a schedule of content to be broadcast during execution of the transmission;
  - encodes metadata for each content package into a metadata stream providing a description of
    - content within a content stream;
  - sends pre-show content discovery information describing a schedule of content to be
    - broadcast during execution of the transmission; and
  - sends announcement, metadata and content data streams according to a predefined timeslot
    - format.
20. (Previously Presented) The system of claim 19, further comprising:
- a receiver connected with said broadcast system head-end via a second network to receive said packets of content data and selectively cache or present the packets based on a comparison of the metadata describing the content data and user profile information stored on the receiver, wherein said receiver:
    - reads the announcement data stream;
    - finds a predetermined metadata Uniform Resource Locator (URL) in the announcement data
      - stream identifying a location of the metadata stream;
    - decodes the metadata stream identified by the predetermined metadata URL;

correlates metadata from the decoded metadata stream to user profile information stored within the receiver;  
prepares cache space adequate to store content that has metadata matching the user profile information; and  
caches packages with metadata highly correlated with the filtering criteria.

21. (Currently Amended) A machine-readable medium having stored thereon data representing sequences of instructions, the sequences of instructions which, when executed by a processor, cause the processor to:  
generate packets of content data to be broadcast from a content provider system via a network wherein the packets of content data include metadata describing the content data;  
compose a playlist designating an order in which said packets of content are to be broadcast;  
compose a transmission of said packets of content data based on said playlist; and  
execute said transmission of said packets of content data according to said playlist and a transmission policy, wherein the transmission policy is based on a playout policy and one or more network resources that are available for said transmission, wherein the playout policy is a list of protocol-neutral and protocol-specific transmission settings, and wherein the protocol-specific transmission settings are specific to a protocol used by a transmission execution process.
22. (Original) The machine-readable medium of claim 21, wherein said generating packets of content data and said composing a playlist are performed by the content provider system.

23. (Original) The machine-readable medium of claim 21, wherein said composing a transmission and executing said transmission are performed by a broadcast system head-end.
24. (Original) The machine-readable medium of claim 21, wherein said metadata comprises Extensible Markup Language (XML) tags.
25. (Original) The machine-readable medium of claim 21, wherein said metadata comprises pre-show content discovery information.
26. (Original) The machine-readable medium of claim 21, wherein said metadata comprises real-time content discovery information.
27. (Original) The machine-readable medium of claim 21, wherein said generating packets of content data comprises:
  - gathering content to be broadcast from a content cache on the content provider system;
  - separating said content into packages and package elements within the packages;
  - assigning each package and package element a unique identifier;
  - storing said packages in a package cache;
  - assigning metadata tags identifying content within the packages and package elements to the packages and package elements; and
  - marking tagged packages as ready for inclusion in playlists.

28. (Original) The machine-readable medium of claim 27, wherein said composing a playlist comprises:
- grouping all related packages into content groups;
  - encapsulating content groups into a playlist; and
  - passing the playlist to a transmission composition process.
29. (Original) The machine-readable medium of claim 28, further comprising concatenating two or more portions of metadata in the playlist prior to passing the playlist to a transmission composition process to generate metadata representing the entire playlist.
30. (Original) The machine-readable medium of claim 21, wherein said composing a transmission comprises:
- selecting a playlist for scheduling;
  - defining playout policy parameters;
  - determining bandwidth required to transmit the playlist;
  - determining transmission policy parameters based on the bandwidth required to transmit the playlist and the playout policy parameters;
  - assigning network resources to the playlist based on the transmission policy;
  - caching the transmission as active and scheduled.
31. (Original) The machine-readable medium of claim 28, wherein said executing said transmission comprises:

reading a previously generated transmission;  
loading transmission policy parameters;  
encoding announcement data for each content package into an announcement data stream  
describing a schedule of content to be broadcast during execution of the transmission;  
encoding metadata for each content package into a metadata stream providing a description  
of content within a content stream;  
sending pre-show content discovery information describing a schedule of content to be  
broadcast during execution of the transmission; and  
sending announcement, metadata and content data streams according to a predefined timeslot  
format.

32. (Previously Presented) The machine-readable medium of claim 31, further comprising:  
receive said packets of content data at a receiver connected with said content provider system  
via said network; and  
selectively cache or present the packets based on a comparison of the metadata describing the  
content data and user profile information stored on the receiver, wherein said  
receiving said packets of content data comprises:  
reading the announcement data stream;  
finding a predetermined metadata Uniform Resource Locator (URL) in the  
announcement data stream identifying a location of the metadata stream;  
decoding a metadata stream identified by the predetermined metadata URL;  
correlating metadata from the decoded metadata stream to user profile  
information stored within the receiver;

preparing cache space adequate to store content that has metadata matching the user profile information; and

caching packages with metadata highly correlated with the filtering criteria.